STEREO TAPE DECK

GX-266D

Operator's Manual

CONTENTS

	Page
IN THE BEGINNING	2
BEFORE OPERATING THE GX-266D	2
FEATURES	2
RECORDING/PLAYBACK SYSTEMS	3
4-TRACK, 2-CHANNEL RECORDING/PLAYBACK SYSTEM	3
4-TRACK, MONAURAL RECORDING/PLAYBACK SYSTEM	3
CONTROLS	4~5
BASIC CONNECTIONS	6
TAPE LOADING	7
TAPE INFORMATION	8
GENERAL PRECAUTIONS IN TAPE HANDLING	8
TAPE SELECTOR	8
TAPE RECORDING TIME	8
STEREO RECORDING 1	9
STEREO RECORDING 2	10
HOW TO USE REC MUTE	10
HOW TO SET RECORDING INPUT LEVEL	10
STEREO RECORDING 3	11
HOW TO USE MEMORY MARKER	11
SIMULTANEOUS MONITORING	11
STEREO PLAYBACK	12
MONAURAL RECORDING/PLAYBACK	13
AUTOMATIC & MANUAL REVERSE RECORDING	14
AUTOMATIC & MANUAL REVERSE PLAYBACK	15
ABSENTEE RECORDING WITH TIMER	16
TIMED PLAYBACK WITH TIMER	17
DUBBING 1	18
DUBBING 2	19
EDITING	20
ERASING OF PRE-RECORDED TAPE	20
OTHER RECORDINGS	21
MIXING RECORDING	21
FOLLOW-UP RECORDING	21
MAINTENANCE	22
CLEANING	22
DEMAGNETIZING	22
SPECIFICATIONS	23
TROUBLE SHOOTING	24

AKAI

MANUFACTURED & DISTRIBUTED BY AKAI ELECTRIC CO., LTD./AKAI TRADING CO., LTD.

WE THANK YOU VERY MUCH FOR YOUR PURCHASE OF OUR AKAI GX-266D.
By employing an automatic two-way recording mechanism and giving full play to the advantages of the 4-track system, this machine enables continuous long-hour recordings. Being designed and developed to allow free utilization as a master deck, the unit is equipped with many functions including a recording mute mechanism with a timing lamp and a timer start switch.
Please read the contents of this Operator's Manual carefully before operating the machine to give full play to all the functions and to enjoy the pleasure of tape recording to the utmost.

BEFORE OPERATING THE GX-266D

In installing this machine, care must be taken to avoid such places as those shown below as they will cause disorders.

- Places exposed to heat radiated from heating appliances or to direct sunshine
- Places of high temperatures
- Dusty places
- Places subjected to vibrations
- Places affected by magnetism

Precautions should also be taken with respect to the following points.

- As this appliance is quite heavy, it will be dangerous in the event it turns over.
- Do not place heavy objects over the power cord, or insert the cord in objects with pointed corners as it will lead to damaging or disconnecting the cord, creating serious danger.
- As unexpected troubles may result from metallic pieces such as hair pins that has dropped inside the unit, do not place such articles near the ventilator.
- Do not block the ventilator.

ALWAYS KEEP HEADS CLEAN

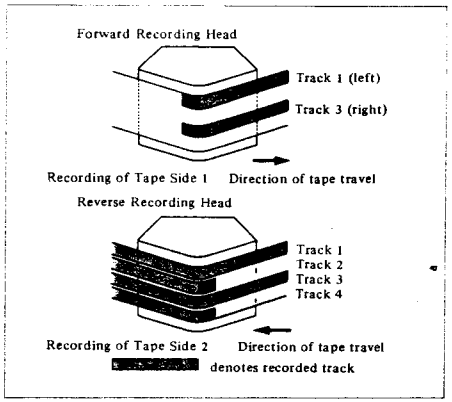
The GX Heads not only have superior electromagnetic properties and durability but also have the feature of repelling dust. However, the heads should always be cleaned before making important recordings, especially when tapes edited by splicing tapes are used.
To maintain stable tape travel, clean those places in the neighborhood of the Capstan and Heads that come in contact with the tape (i.e., Tension Arm, Sensing Pin, Capstan, Tape Guide, etc.) from time to time. Excessive cleaning of the Pinch Roller should be avoided as the roller is susceptible to corrosion by chemicals. (At an average daily use of 1 hour, consider once-a-week cleaning to be sufficient.)

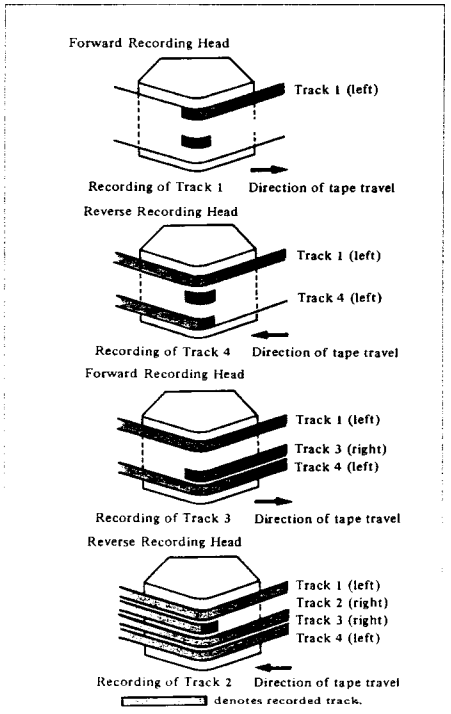
MAKE IT A PRACTICE TO DEMAGNETIZE HEADS

Before recording or playback, make it a practice to demagnetize heads.
Regarding the head-demagnetizing method, please refer to Page 22.

FEATURES

- Automatic and manual reverse recordings and playbacks are possible.
- The Reverse Selector enables changeover among such modes as automatic continuous playback, two-way recording, two-way playback, one-way recording and one-way playback.
- Since the 3-head system is adopted both for the forward and reverse directions, simultaneous monitoring for both directions is possible.
- The GX Heads are used for both recording and playback.
- Adoption of the Direct Drive Center Capstan System by built-in C.P.G. AC Servo-Motor.
- Use of light Feather-Touch Direct Function-Change Mechanism for which system control is effected.
- Recording Mute Mechanism (REC MUTE) which offers convenience when dubbing disc records. Equipped with a Timing Lamp that flashes at approximately 1-second intervals during mute recording. Also provided with a Timer Start Switch that offers convenience in absentee recording, or in timed playback.
- Adoption of convenient Memory Marker for fade-in and fade-out operations during recording, or for mixing recordings.
- Adoption of high-performance, large VU Meter that allows full play of sophisticated recording techniques.



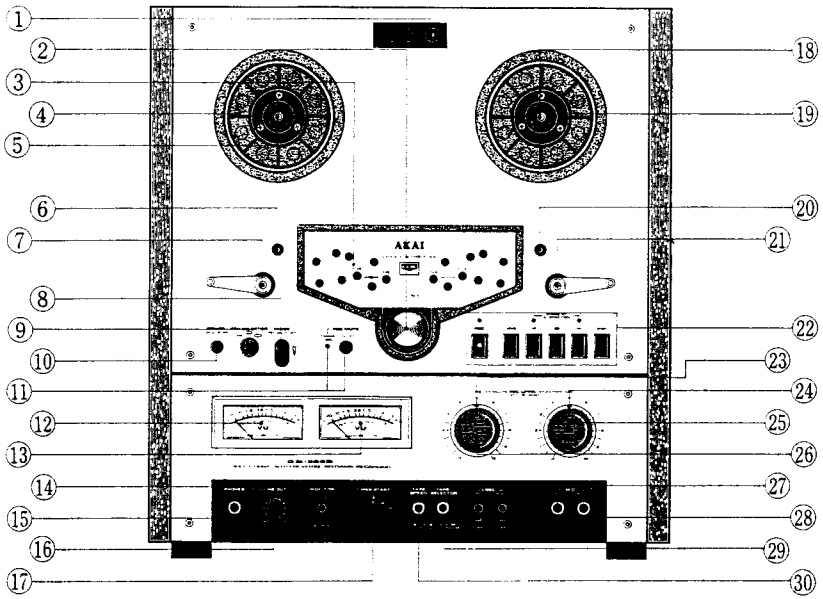


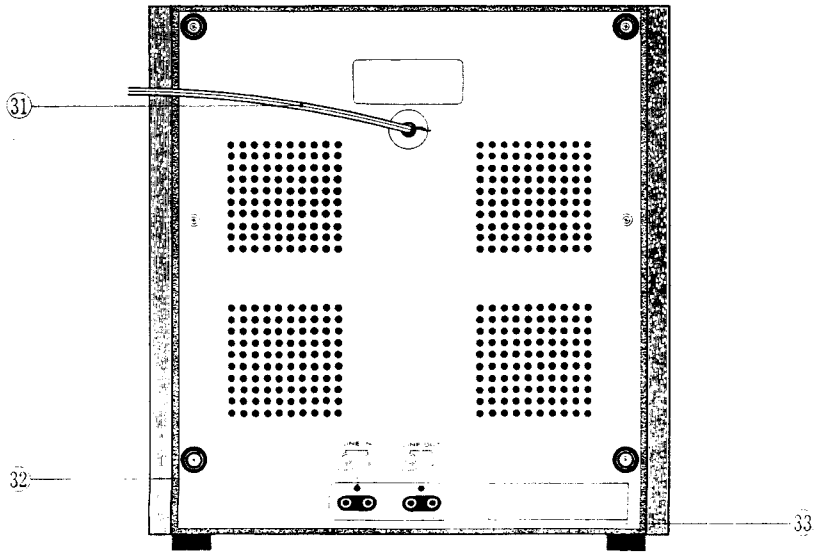
4-TRACK, 2-CHANNEL RECORDING/PLAYBACK SYSTEM

In the 4-track system, the width of the tape is divided into four and each one fourth can be used independently, while in the 2-channel system, two tracks–one for the left channel and one for the right–are used for a single recording or playback. Track 1 and Track 3 are used respectively for the left and right channels, whereas on the reverse side, Track 4 and Track 2 are used respectively for the left and right. In other words, two-way 2-channel recording/playback is possible with a single tape.

4-TRACK MONAURAL RECORDING/PLAYBACK SYSTEM

Four tracks on the tape are used one by one in this system. Generally, recording is made in the sequence of Track 1, Track 4, Track 3 and Track 2. For Tracks 1 and 4, the circuit of the LEFT channel will be actuated, whereas for Tracks 3 and 2, that for the RIGHT channel will. Forward and reverse playback or recording can be done twice. Thus, four times as much materials can be recorded as on a one track system.





1 INDEX COUNTER AND RESET BUTTON
Used for locating the starting point of program. During recording or playback, depress Reset Button at start of tape to set Counter to "000"

2 PINCH ROLLER
Presses tape against Capstan during recording and playback.

3 HEAD COVER
Can be easily removed by pulling whole cover toward yourself. Accommodates (from left) such heads as Forward Erase Head, Recording GX Head, Playback GX Head, Reverse Playback GX Head, Reverse Recording GX Head and Reverse Erase Head.
Head adjustement is possible without removing the cover, but as each head has been perfectly adjusted prior to delivery from the factory, readjustment of the heads by tools such as screw drivers should be avoided.

4 SUPPLY REEL TABLE

5 REEL RETAINER

6 TAPE GUIDE (SENSING POLE: FORWARD→REVERSE)
For automatic reverse recording and playback, tape travel will be reversed when the Sensing Tape attached to the tape comes in contact with this pole. However, it will not function during fast forward, or rewind.

7 TENSION ARM
Prevents sudden tension from being applied to tape. Is interlocked with automatic stop and incorporates a One-Way Damp Mechanism to effect smooth tape start.

8 PAUSE LEVER (PAUSE)/REC MUTE OFF
Used during recording (playback) to temporarily suspend tape travel. When lever is pushed down in ▽ direction, the tape will temporarily stop, and when pushed down again, the tape will be released. When REC MUTE is positioned ON, pushing down of PAUSE LEVER will cause REC MUTE to be released.

9 REVERSE SELECTOR (REV SELECTOR)
During recording or playback, operation in such modes as one-way recording (playback), two-way recording (playback) and continuous playback is possible, according to the position to which the Selector has been positioned. Refer to Pages 14 and 15.

10 POWER SWITCH (POWER)
Depress to switch on power. Depress again to switch off.
* To prevent erroneous operation during switch-on of power, confirm that the timer start switch is positioned to PULL.

11 RECORDING MUTE SWITCH (REC MUTE)/TIMING LAMP
When depressed during recording, the mode will change over to a no-signal recording mode. Refer to Page 10.

12 VU METER (FOR LEFT CHANNEL)
Indicates recording input level and playback level.
* Not interlocked with Line-Out Control.

13 VU METER (FOR RIGHT CHANNEL)

14 MONITOR SWITCH (MONITOR)
To check recording input, set switch to SOURCE. To check recorded tape, it should be set to TAPE. By changing over alternately from SOURCE to TAPE and vice versa during recording, recorded sound can be compared with recording input.

15 HEADPHONE JACK (PHONES)
When monitoring with headphones during recording or playback, insert headphone plug into this jack.
* Headphone output can be adjusted with the Output Control. (8 ohms impedance headphones are recommended.)

16 LINE OUTPUT HEADPHONE OUTPUT CONTROLS (LINE OUT–PHONES)
Enables simultaneous adjustment of line and headphone output levels during recording or playback. The controls are of the left/right simultaneously variable type.
Line output can be adjusted from 0 up to 0.775V at maximum, and headphone output from 0 up to 100mV.
* Not interlocked with VU METER indicator.

17 TIMER START SWITCH (TIMER START)
To be used for absentee recording and timed playback. Lock the switch by pulling it first toward yourself and then turning it clockwise.
* For times other than timed recording (playback), confirm that the Timer Start Switch has been brought back to the PULL position. This is especially important as, when the Start Switch is in LOCK position when a tape is loaded, the set will automatically be put into a recording (playback) mode immediately following switch on of power.

18 REEL RETAINER

19 TAKE-UP REEL TABLE

20 TAPE GUIDE

21 TENSION ARM (SENSING POLE: REVERSE → FORWARD)
Not only functions as a tension arm to prevent the tape from being subjected to sudden tension, but also functions as a reverse → forward sensing pole.

22 FAST FORWARD BUTTON (►►)
Depress to fast-forward tape in direction of arrow.
* When this button is depressed, the Forward Direction Lamp will illuminate.

FORWARD BUTTON (►)
Depress to bring set into forward playback mode. For forward recording, depress this button, while also pushing Recording Button (REC).
* Depressing of this button will cause the Forward Direction Lamp to illuminate.

STOP BUTTON (■)
To cancel such modes as recording, playback, fast forward and rewind, depress this button.

REVERSE BUTTON (◄)
Depress this button for playback in reverse (REV) direction. For reverse recording, depress this button, while also depressing Recording Button.
* When this button is depressed, it will cause the Reverse Direction Lamp to illuminate. When power is switched on again after being switched off once during the reverse mode, the direction of tape travel will automatically change to FORWARD.

REWIND BUTTON (◄◄)
Depress to rewind tape in direction of arrow.
* When this button is depressed, it will cause the Reverse Direction Lamp to illuminate.

RECORDING BUTTON (REC)
For forward recording, depress this button together with the Forward Button (►), and for reverse recording, together with the Reverse Button (◄).
* When the Recording mode is effected, the Recording Indicator Lamp will illuminate in red.

DIRECTION LAMPS (STAND BY & DIRECTION)
Indicates the direction of the Capstan Motor revolution. Thus, it indicates the direction of tape travel during Recording and Playback.

23 MEMORY MARKER (FOR LINE-IN)
Offers convenience by indicating the original position of the Input Controls at Fade-In, Fade-Out and Mixing during recording.

24 MEMORY MARKER (FOR MIC-IN)

25 MICROPHONE INPUT CONTROLS (REC LEVEL–MIC)
Used for adjusting recording input level for microphone input. The control on the inner side is for the left channel, and that on the outer side for the right. To allow simple Fade-In and Fade-Out, the left and right controls are not only made coaxial but are of the friction type that makes them turn together.

26 LINE INPUT CONTROLS (REC LEVEL–LINE)
Employed for adjusting recording input level for line input. The one on the inner side is for the left channel, and that on the outer side for the right.
To allow simple Fade-In and Fade-Out, the left and right controls are not only made coaxial but are of the friction type that makes them turn together.

27 MICROPHONE JACK (MIC)
When using a microphone, insert the microphone plug into this jack. Use LEFT for the left channel and RIGHT for the right channel.

28 RECORDING LEVER (REC)
Do not forget to set it to the ON position during recording. For stereo recording, both the Right and Left Lever should be positioned ON, whereas for monaural recording, either the right or left lever need only be positioned ON.
Be sure to keep the Lever in a pushed-down position during times other than recording as they also function as a switch to prevent erasing by mistake when Timer Start Switch is used.

29 TAPE SELECTOR
Set to LOW NOISE, or WIDE RANGE according to the type of tape. For further details, refer to Page 7.

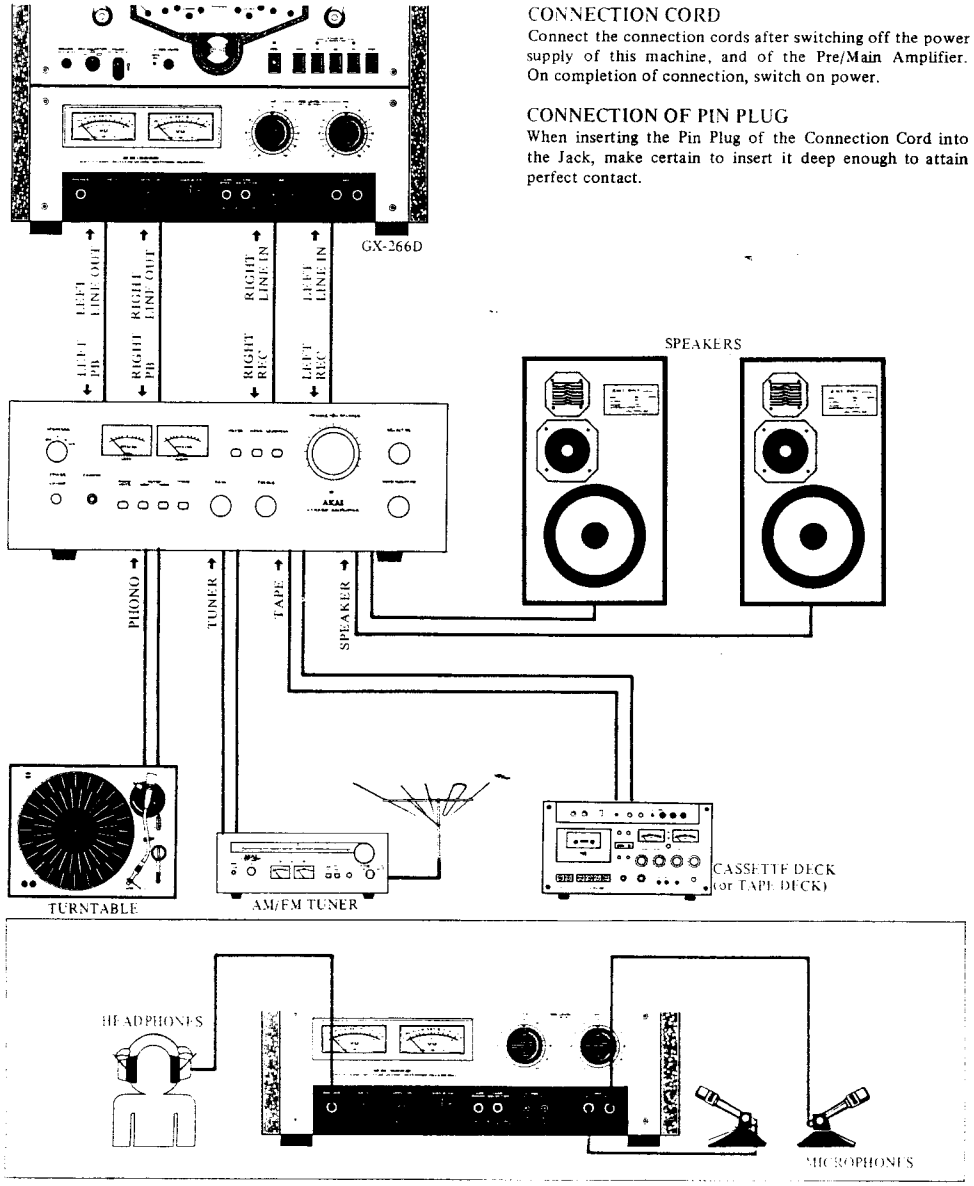
30 TAPE SPEED SELECTOR
Selects desired speed from two speeds, 7½ ips (19cm/sec) and 3¾ ips (9.5cm/sec).

31 POWER CORD

32 LINE INPUT JACKS (LINE-IN)
When dubbing with another tape deck, or when recording from an external amplifier, insert connection cord into these jacks.

33 LINE OUTPUT JACKS (LINE-OUT)
For connections to an external amplifier, or when dubbing into tapes on a separate tape deck, line output connection is made through these jacks. Use LEFT terminal for left channel and RIGHT for right.

* With respect to absentee recordings, or timed playbacks with timer, or for tape dubbings, please refer to Pages 16 - 19.

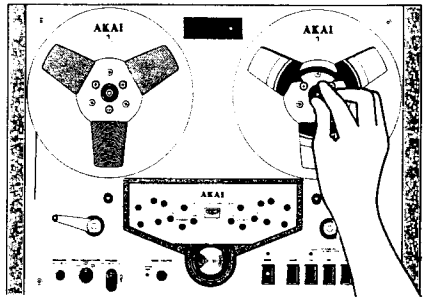


CONNECTION CORD

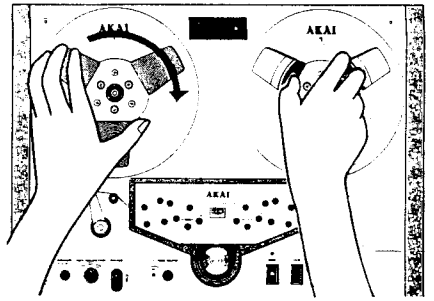
Connect the connection cords after switching off the power supply of this machine, and of the Pre/Main Amplifier. On completion of connection, switch on power.

CONNECTION OF PIN PLUG

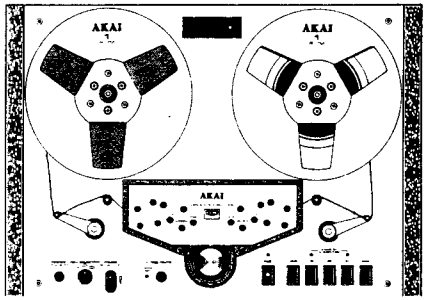
When inserting the Pin Plug of the Connection Cord into the Jack, make certain to insert it deep enough to attain perfect contact.



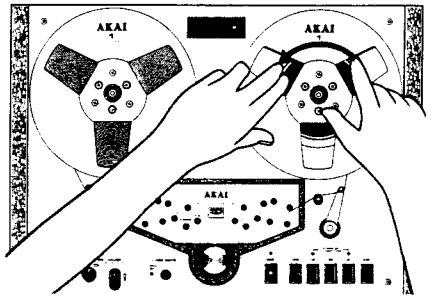
1. After setting a full reel of tape on the Supply Reel Table and an empty reel on the Take-Up Reel Table, lock it into place by pulling the tip of Reel Retainer provided at the end of the Reel Table Shaft outward and turning to the left or right.



3. After inserting tape into the slit on the Reel Hub hold it to the Hub using right hand thumb. Then, with left hand, hold the Supply Reel and turn it clockwise so that the tape slack is taken out.



2. Unwind about a 80cm to 90cm length of tape and after threading it through the Tension Arm, Tape Guide, Head Block and Tension Arm engage it onto the empty reel.



4. Then while holding tape against Hub with thumb and with the assistance of your left hand, turn Take-Up Reel counterclockwise. Wind tape around Take-Up Reel several times so that the tape will not disengaged from the reel.

GENERAL PRECAUTIONS IN TAPE HANDLING

- Be careful not to touch tape's magnetic surface with fingers as it will become a source of drop-out.
- No recording can be made on the leader tapes at both ends (first part and end of reel) of the tape. Thus, before starting, take up the leader tape.
- Full care must be taken in tape handling when using thin tape (200% and above: e.g., when tape of a 740m length (2,400ft) is used with Small Hub 7 inch Reel).

Long-period storage of tapes that was taken up in a fast-forward or rewind mode will cause damage to the tape, leading to unexpected troubles or will make them unfit for use.

Therefore, the tapes should be stored in a condition as taken up in an orderly manner, with the tape traveling at the fixed speed of Recording or Playback. However, either rewind or fast-forward the entire reel of tape before use of the tape after storage.

TAPE SELECTOR

The following list shows the proper positions of the Tape Selector, corresponding to marketed tapes.

Brand	LOW NOISE Position	WIDE RANGE Position
	Low-Noise type	Low-Noise, High-Output type
AKAI		LN-150-7 LN-150-10M
SCOTCH	#211, #212	#206, #207, #218 Classic
SONY		SLH SLH Back Coat (SLH-BL) DUAD
TDK	Low Noise	AUDUA
FUJI FILM	New FM (FM –)	NEW FG (FG –) FB (FB –)
MAXELL	Low Noise (LM –)	UD US Back Coat (UD-B)
COLUMBIA	PST	MS (– MS)
AGFA	Hi-Fi Low Noise (PE –) Professional Use (PER525)	
BASF	LH (LP, DP)	LPR, LGR

TAPE RECORDING TIME

Marketed tapes are of various lengths including those of 740m (2,400 ft), 555m (1,800 ft) and 370m (1,200 ft). Since this machine offers two choices of tape speed (7-1/2 ips (19 cm/sec) and 3-3/4 ips (9.5 cm/sec)) by the Tape Speed Selector, please refer to the following list for the recording time.

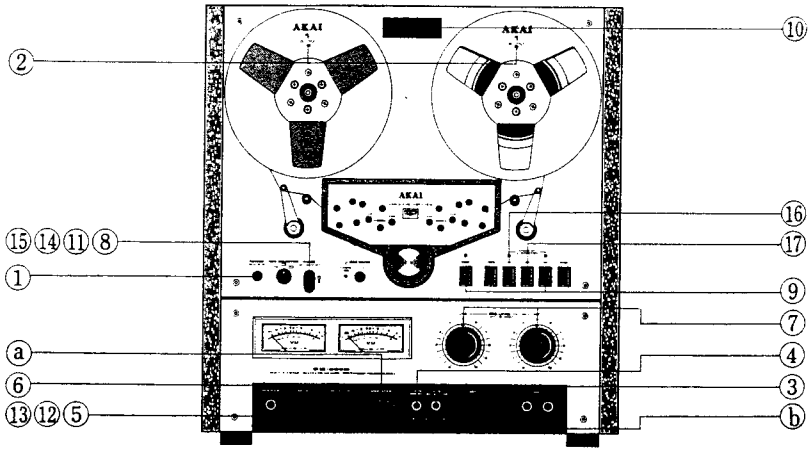
4-TRACK 2-CHANNEL STEREO RECORDING (PLAYBACK) SYSTEM

Tape Speed	Tape Length	740m (2,400ft)	555m (1,800ft)	370m (1,200ft)
7-1/2 ips (19 cm/sec)	One-way	60 min.	45 min.	30 min.
	Two-way	120	90	60
3-3/4 ips (9.5 cm/sec)	One-way	120 min.	90 min.	60 min.
	Two-way	240	180	120

4-TRACK MONAURAL RECORDING (PLAYBACK) SYSTEM

Tape Speed	Tape Length	740m (2,400ft)	555m (1,800ft)	370m (1,200ft)
7-1/2 ips (19 cm/sec)	One-way	60 min.	45 min.	30 min.
	Two-way	120	90	60
	Two-way + one-way	180	135	90
	Double two-way	240	180	120
3-3/4 ips (9.5 cm/sec)	One-way	120 min.	90 min.	60 min.
	Two-way	240	180	120
	Two-way + one-way	360	270	180
	Double two-way	480	360	240

For recordings using Timer, please refer to Page 16. The figures indicate the sequence of operation for recording.



MATTERS TO BE CONFIRMED BEFORE OPERATION

- Have the connections been properly made? (Refer to Page 6.)
- Position Timer Start Switch to PULL. (ⓐ of above drawing)
- Set both Left and Right Recording Levers (REC) to ON position. (ⓑ of above drawing)
- Has the Power Cord been properly inserted into socket?
- Do not move the recording lever(s) from on position to off position during recording. If recording lever(s) must be switched to off position, depress stop button first and confirm stop mode before switching it off.

OPERATION

1. Switch on power by setting Power Switches of this machine and of other units such as the FM Tuner, Pre/Main Amplifier to ON position.
2. Set full tape reel and empty reel on their respective reel tables.
3. Set Tape Selector according to the type of tape used.
4. After selecting an optimum tape speed, set the Tape Speed Selector accordingly.
5. Position the Monitor Switch to SOURCE.
6. Set Line Output Control to maximum position by turning it clockwise as far as it will go.
7. Turn Line-In Control (or Mic-In Control for recordings with microphone) and adjust the recording input level.
   * Refer to "HOW TO SET RECORDING INPUT LEVEL" (Page 10) and "HOW TO USE MEMORY MARKER" (Page 11).
8. Push down and lock Pause Lever in the direction of arrow.
   * This Pause Lever is not used for "Follow-Up Recording". Refer to Page 20.
9. Depress Recording Button (REC) together with the Forward Button (►).
   * Confirm illumination of the red Recording Indicator Lamp.
10. Depress Reset Button to set Tape Counter to "0000".
11. When the time has arrived for recording, push down the Pause Lever in the direction of the arrow once again to release the PAUSE mode. This will cause the tape to start traveling and the recording to begin.
12. When recording has started, position Monitor Switch to TAPE to effect simultaneous monitoring.
    * For "Simultaneous Monitoring", refer to Page 11. When monitoring through a speaker, do not forget to set Tape Monitor Switch of Pre/Main Amplifier (or Receiver) to TAPE. Otherwise, simultaneous monitoring cannot be effected.
    * In this case, to facilitate monitoring, the Line-Out Control of this unit can be adjusted.
13. By the use of the Pause Lever, recording may be stopped during the course of recording without releasing the RECORDING mode. Before pause, set Monitor Switch to SOURCE to monitor source signals during Pause mode.
14. When reaching a place where recording is to be temporarily suspended, lock Pause Lever by pushing it down in the arrow direction to effect the PAUSE mode.
15. By pushing down Pause Lever again in the arrow direction, the PAUSE mode will be released and the tape will start traveling again, re-starting recording.
16. Before tape reaches the end, depress the Reverse Button (◄) at some place where the music come to a pause. This will cause the tape to stop for about 3 or 4 seconds and then to shift to reverse recording. (Refer to 4 TRACK 2 CHANNEL RECORDING/PLAYBACK SYSTEM Page 3.)
17. To release Recording mode, depress Stop Button.
    * When recording has been completed, and playback is to be effected from the beginning of the tape, depress the Rewind Button (◄◄), or Fast Forward Button to run the tape to the point where the Tape Counter indicates "0000".

    Refer to Pages 12 – 15 for playback.

HOW TO USE REC MUTE

When REC MUTE Switch is depressed during recording, the recording amp circuit will be brought into a NO-SIGNAL mode, causing the Timing Lamp to flash at intervals of approximately one second. No recording will be made on the tape during this period. Further, during REC MUTE, source monitoring can be effected (though it will not be recorded on the tape), by changing over the Monitor Switch to SOURCE.

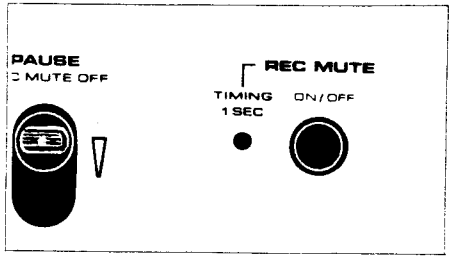
When dubbing from disk records, or editing the tape while dubbing, a NO-SIGNAL portion of an arbitrary length can be inserted between the music by making use of the Timing Lamp that flashes at about one-second intervals.

With respect to Operations 13, 14 and 15 of "STEREO RECORDING 1", refer to the following as a typical example of clever utilization of REC MUTE.

Carry out Operations 1 through 13.

14. When reaching a point where a NO-SIGNAL recording portion is to be inserted, depress REC MUTE Switch. (Indicated in drawing below.)
    * This will cause the Timing Lamp to flash at about one-second intervals.
15. After determining the time length to be placed between the music, count the times for which the Timing Lamp has flashed and push down and lock the Pause Lever in the direction of the arrow to effect the PAUSE mode.
    * This will cause the Timing Lamp to go out and the REC MUTE mode to be released.

Operations 16 and 17 are to be carried out similarly to those previously described.



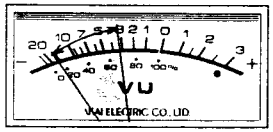
HOW TO SET RECORDING INPUT LEVEL

Since sensitivity will vary according to the tape used, the best way to set the recording input level will be to adjust the Input Controls (with the unit in the RECORDING mode and the Monitor Switch positioned to TAPE) in a manner to bring it close to "0VU" when the swing of the VU Meter's indicator is maximum. Even if the left and right Input Controls are positioned somewhat differently, the level indicated on the VU meter should be considered as the standard for all adjustments and therefore, level adjustments should be effected centering on the VU Meters. This will ensure the best recording level.

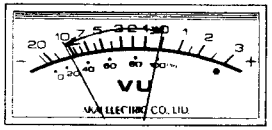
Because this machine is equipped with GX Heads, not only has loss been minimized during recording and playback but recording without any distortion is possible even when the level exceeds "0VU" when using the wide dynamic-range, high-performance tape.

Further, at recording, the level can be raised to the highest possible range without distortion by simultaneous monitoring. By raising the level, the dynamic range becomes that much wider, enabling recording with excellent S/N ratio.

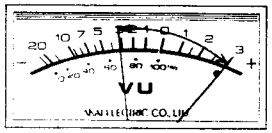
* Depending on the recording input, the VU Meter will not indicate distortion that has generated in the recordings on the tape. Even in such cases, the presence of any distortion can be checked through simultaneous monitoring.



1. Level is too low.
S/N ratio deteriorates.



2. Level is just right.
Excellent recording



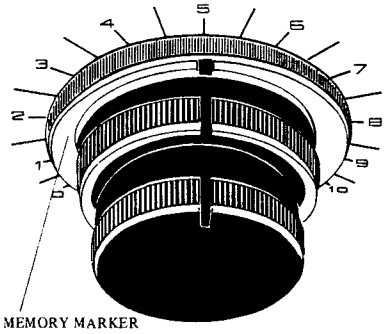
3. Level is too high.
Distortion generates.

HOW TO USE MEMORY MARKER

In the playback of sources such as music, if the number is suddenly started in a large volume, or if it suddenly ends in an abrupt manner, the effect would be quite unnatural. To avoid such phenomena from occurring, such recording techniques are employed as those known as FADE-IN, which is the technique in which recording is started in a small volume and then is gradually raised until the optimum volume is reached, or FADE-OUT, in which, the sound at the end of the number is gradually diminished from an optimum volume.

To effect FADE-IN, the Recording Input Control is gradually tuned up until the volume reaches an optimum recording level. Thus, it is necessary to have the position of the optimum recording level marked in advance. Meanwhile, in the case of FADE-OUT, the Input Control is gradually tuned down from the position of the optimum recording level. In this case too, it is necessary to have the position of the optimum recording level marked. Since the Memory Marker is not interlocked with the movement of the Input Control, it is capable of indicating the position of the optimum recording level at all times. Notably for FADE-IN, in which the Input Control is tuned from minimum up to the optimum-level position, it is important that the optimum position of the Input Control be indicated in advance.

The Memory Marker, by being set to the optimum volume position, thus offers convenience in FADE-IN and FADE-OUT operations.



SIMULTANEOUS MONITORING

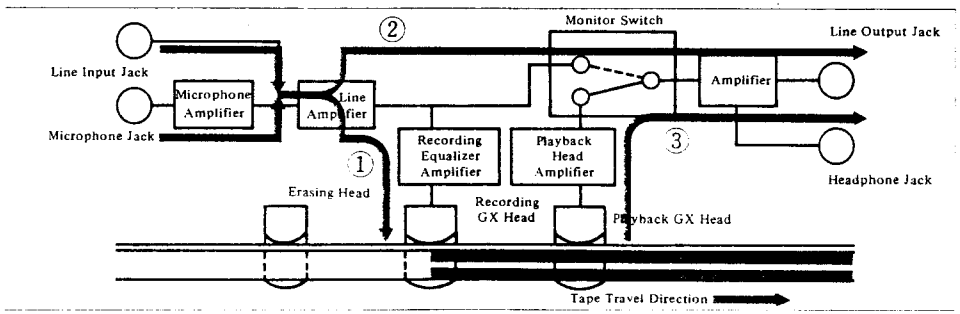
This is the method by which the condition of recording that is taking place on the tape is confirmed during recording operations.

By making use of this method, it is possible to confirm whether an important program is being positively recorded or not, or to check for any distortion due to overlevel recordings.

With the machine set in the RECORDING mode, and by positioning the Monitor Switch to:

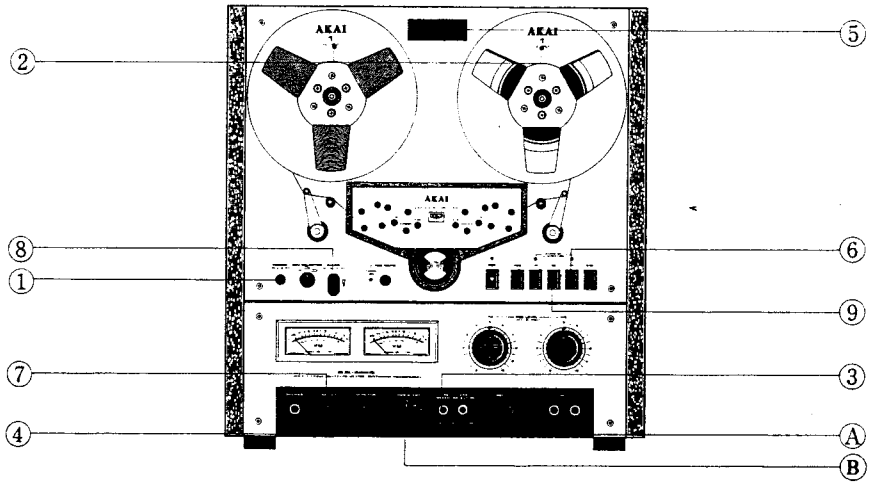
a) SOURCE, the original recording input signals can be monitored. (The recording input signals flow in the manner of ① and ② shown in the drawing.)

b) TAPE, the newly recorded signals on the tape can be monitored. (The signals will flow in the manner of ① and ③ shown in the drawing.)



* The drawing shows the condition in the Forward direction.

Regarding Playback using Timer, see Page 17. The figures indicate the sequence of operations for playback.



MATTERS TO BE CONFIRMED BEFORE OPERATION

- To prevent the machine from being put into the RECORDING mode by mistake during playback, make it a practice to have both the left and right REC levers positioned OFF. (Ⓐ on above drawing)
- Are connections correct? (Refer to Page 6.)
- Position the Timer Start Switch (TIMER START) to PULL. (Ⓑ on above drawing.)
- Is the Power Cord properly inserted into the socket?

OPERATION

1. Switch on power by setting the Power Switches of this machine, the Pre/Main Amplifier to the ON position.
2. Set the recorded tape and the empty reel on their respective Reel Tables.
3. Set the Tape Speed Selector to the speed at which the tape was recorded.
4. Position Monitor Switch to TAPE.
5. Set Tape Counter to "0000" by depressing Reset Button.
6. Depress Forward Button (►) to effect playback.
   - For Reverse Playback, refer to Page 15.
   - When listening to reproduced sounds through speakers, position the Tape Monitor Switch of the Pre/Main Amplifier (or of Receiver) to TAPE.
7. Using Output Control, adjust the headphone volume and the output to the Pre/Main Amplifier (or Receiver).
   - When listening to the reproduced sounds through speakers, adjust speaker volume with the Volume Controls of the Pre/Main Amplifier (or Receiver).
   - For instructions on the use of the Line-Out Controls, see next column.
8. To temporarily suspend tape travel, push down Pause Lever in the direction of arrow and lock it. To restart playback, push down Pause Lever again and bring it back to the original position.
9. To stop Playback mode, depress Stop Button.

HOW TO USE LINE OUTPUT CONTROL

Confirm that connections conform to the "BASIC CONNECTIONS".

This machine is equipped with a variable output control that enables the line output to be varied from 0 up to a maximum level of 0.775V (during 0VU). When an external amplifier is employed, it is necessary to match the line output level of the deck with the line input level of the external amplifier.

Consider the standard volume of the amplifier to be the volume at which one ordinarily listens to FM broadcasts of a receiver or a tuner, and keep the volume control at this position. Then position the Monitor Switch of the external amplifier to TAPE. If the Line Output of this deck is inappropriate, the volume may change vastly when the switch is changed. If this should be the case, the Line Output Control of this deck is to be adjusted (with the Monitor Switch positioned to TAPE) so that the volume when the switch is positioned to TAPE is equal to that when positioned to SOURCE.

MATTERS TO BE CONFIRMED BEFORE OPERATION

- Position Timer Start Switch (TIMER START) to PULL.
- Is the Power Cord properly inserted into socket?

In Monaural Recording, recording can be made on all the tracks, if, for example, a two-way recording is made on the LEFT (left channel) and another two-way recording is made on the RIGHT (right channel).

The following drawings show Monaural Recording made in the sequence of LEFT (Track 1→Track 4)→RIGHT (Track 3→Track 2).

MONAURAL RECORDING

After effecting Operations 1 through 4 of "STEREO RECORDING ① " (Page 9), position the LEFT (left channel) Recording Lever (REC) alone to ON, and position RIGHT (right channel) Recording Lever to OFF.

When completing this, revert to "STEREO RECORDING ① " and carry out Operations 5 through 17.

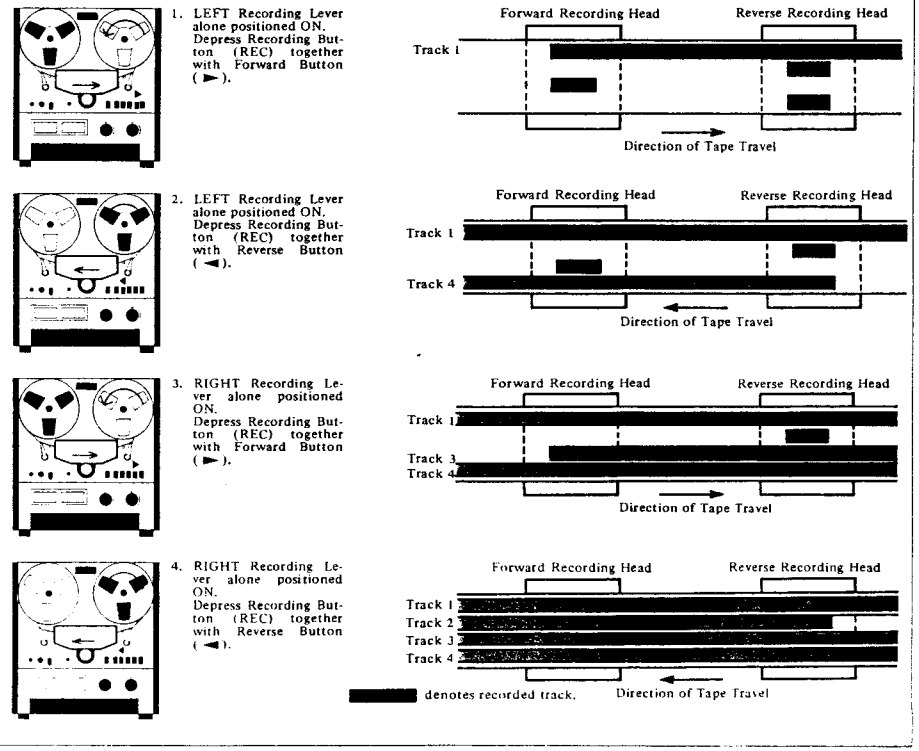
- Do not move the recording levers from on position to off position during recording. If recording levers must be switched to off position, depress stop button first and confirm stop mode before switching it off.

MONAURAL PLAYBACK

Set both RIGHT (right channel) and LEFT (left channel) Recording Levers to OFF.

Operations to be carried out are the same as those described in 1 through 9 of "STEREO PLAYBACK" (Page 12), excepting for 6 and 7, when listening to the reproduced sounds.

In this machine, since playback is made in a stereophonic manner, the output cannot be produced for a single channel alone. Accordingly, the Mode Selectors of the Pre/Main Amplifier should be set to either LEFT or RIGHT.


1. LEFT Recording Lever alone positioned ON. Depress Recording Button (REC) together with Forward Button (►).
Forward Recording Head
Reverse Recording Head
Track 1
Direction of Tape Travel
2. LEFT Recording Lever alone positioned ON. Depress Recording Button (REC) together with Reverse Button (◄).
Forward Recording Head
Reverse Recording Head
Track 1
Track 4
Direction of Tape Travel
3. RIGHT Recording Lever alone positioned ON. Depress Recording Button (REC) together with Forward Button (►).
Forward Recording Head
Reverse Recording Head
Track 1
Track 3
Track 4
Direction of Tape Travel
4. RIGHT Recording Lever alone positioned ON. Depress Recording Button (REC) together with Reverse Button (◄).
Forward Recording Head
Reverse Recording Head
Track 1
Track 2
Track 3
Track 4
denotes recorded track.
Direction of Tape Travel

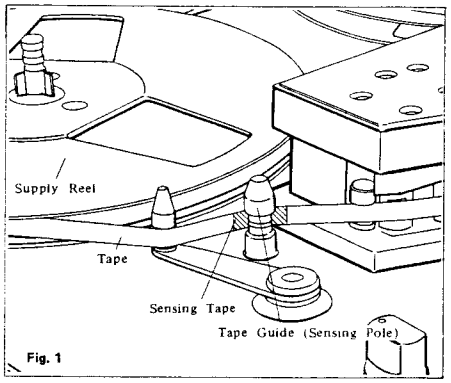


Fig. 1

To change the direction of tape travel automatically from FORWARD to REVERSE (See below), or from REVERSE to FORWARD (See next page: For Playback only), the following operations must be carried out.

PREPARATION FOR AUTOMATIC REVERSE

Attach a 2.5cm – 4cm length of Sensing Tape (Accessory) to the base (back surface) of the tape at a point where the direction is to be reversed. (See Fig. 1.)

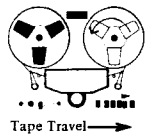
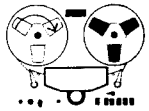
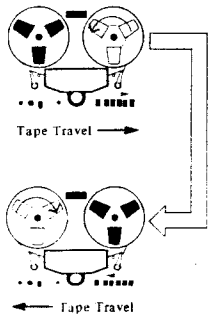
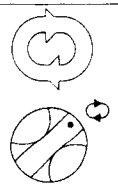
When the sensing tape comes in contact with the sensing pole, the direction of tape travel will automatically change from the Forward to Reverse.

In this case, during recording the Recording mode will remain and will not be released.

* Do not attach Sensing Tape to places other than where tape travel is to be automatically reversed.

The above operation can only be effected when the Reverse Selector is positioned, either to TWO-WAY(⊃), or to CONTINUOUS (⬭).

RECORDING

Position of Reverse Selector	Tape Travel	Operation
One-Way	1. Forward only  Tape Travel →	1. When Recording Button (REC) is depressed together with Forward Button (►), recording is possible only in Forward direction. When tape reaches the end, it will automatically stop. * Even when Sensing Tape is attached to the tape, the above operations will take place.
One-Way	2. Reverse only  ← Tape Travel	2. When Recording Button (REC) is depressed together with Reverse Button (◄), recording is only possible in Reverse direction. When tape reaches the end, it will automatically stop. * Even when Sensing Tape is attached to the tape, the above operations will take place.
Two-Way (Forward → Reverse only)	3.  Tape Travel → ← Tape Travel	3. When Recording Button (REC) is depressed together with Forward Button (►), the tape will come to an automatic stop, following completion of a two-way (Forward → Reverse) recording. 3'. When Recording Button (REC) is depressed together with Reverse Button (◄), recording is possible only in the Reverse direction. * In the case of recording, to prevent erasing by mistake, the tape will automatically stop following completion of a two-way (Forward → Reverse) recording even when Sensing Tape is attached to both ends of the tape and the Reverse Selector is positioned to CONTINUOUS (⬭).
Continuous		

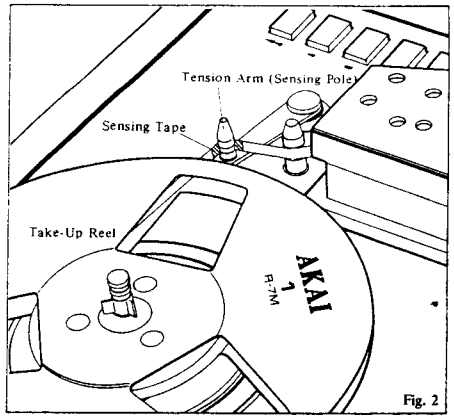


Fig. 2

PREPARATION FOR CONTINUOUS PLAYBACK

For Continuous Playback, it is necessary to attach Sensing Tape to two places – to the beginning and end of the recorded tape.

Attach a 2.5cm – 4cm length of Sensing Tape (Accessory) to the magnetic surface of the tape where tape travel is to be changed from Reverse to Forward. (See Fig. 2.)

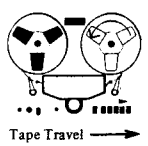
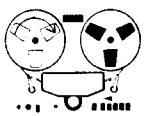
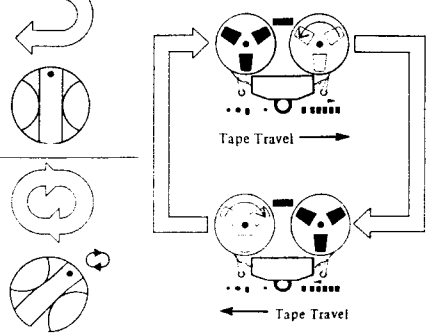
When the Sensing Tape makes contact with the Sensing Pole (Tension Arm), the tape will automatically change the direction and will travel Forward.

* Regarding preparation for automatic change from Forward to Reverse, please refer to Page 14.
* When in the RECORDING mode, the tape will continue recording to the end of the tape, even after the Sensing Tape comes in contact with the Tension Arm.
* Do not attach Sensing Tape to places other than where continuous playback is desired.

The above operations can be effected only when the Reverse Selector is set to CONTINUOUS (⬭).

● For preparations for AUTOMATIC REVERSE, refer to Page 14 .

PLAYBACK

Position of Reverse Selector	Tape Travel	Operation
One-Way	1. Forward only  Tape Travel →	1. When Forward Button (►) is depressed, playback is possible only in Forward direction. When the tape reaches the end, it will be brought to an automatic stop. * Even when Sensing Tape is attached to the tape, the above operation will take place.
One-Way	2. Reverse only  ← Tape Travel	2. When Reverse Button (◄) is depressed, playback is possible only in Reverse direction. When tape reaches the end, it will be brought to an automatic stop. * Even when Sensing Tape is attached to the tape, the above operation will take place.
Two-Way (Forward → Reverse only)	3.  Tape Travel → ← Tape Travel	3. When the Forward Button (►) is depressed, the tape will be brought to an automatic stop following completion of a two-way (Forward → Reverse only) playback. 3'. When the Reverse Button (◄) is depressed, playback is possible only in the Reverse direction.
Continuous		4. When Forward Button (►) is depressed, playback will continue between both ends of the tape where Sensing Tape is attached endlessly until the Stop Button is depressed.

ABSENTEE RECORDING WITH TIMER

MATTERS TO BE CONFIRMED BEFORE OPERATION

- Have a Timer ready.
- Is the time indicated on the Timer correct?
- Make connections, referring to the drawing shown below as well as to that shown on Page 6.
- Set Recording Lever (REC) to ON position.
- Set Timer Start Switch to PULL.

OPERATION

1. Set Timer to EVER-ON.
   * The EVER-ON indication of the Timer sometimes differs depending on the manufacturer. Refer to the Operator's Manual of Timer for further details.
2. Switch on power, by positioning Power Switch ON.
3. Set the tape and the empty reel on their respective Reel Tables.
4. Set the Tape Selector according to the type of tape used.
5. After selecting the tape speed, set Tape Speed Selector to that speed.
6. Position the Monitor Switch of this deck to SOURCE.
7. Using the Input Controls, set the recording input level.
   * Refer to "HOW TO SET RECORDING INPUT LEVEL" (Page 10).
8. Adjust Line-Out Control of this deck and the volume control of the amplifier to obtain desired volume from speakers.
9. Set Reverse Selector in a manner to match the purpose for which recording is to be made.
   * Refer to "AUTOMATIC AND MANUAL REVERSE RECORDING" (Page 14).
10. Depress Reset Button to bring Tape Counter indication to "0000".
11. Set the Timer to the desired time.
12. Set Timer to AUTO.
    * This will cause power supply of each equipment to be disconnected.
13. While pulling the Timer Start Switch (TIMER START) of the deck toward yourself, turn it clockwise and release the Switch when it reaches the LOCK position.
14. With this, all operations required for Timer Recording are completed.

- When recording is to be carried out only in the Reverse direction, carry out Operations 1 through 9 and 11 first and then proceed through the operations described below.

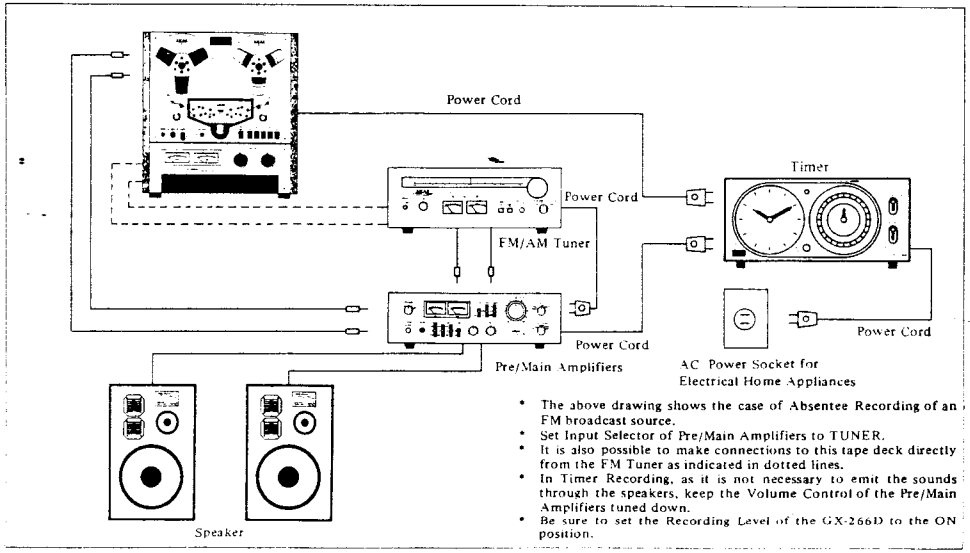
a Push down Pause Lever in direction of arrow and lock it.

b Depress Reverse Button (◄).
   * Confirm that this causes Reverse Direction Lamp to illuminate.

c While pulling the Timer Start Switch (TIMER START) towards yourself, turn it clockwise and release when lever reaches the LOCK position.

d After effecting Operations 12, 13 and 14 stated earlier, do not forget to push down the Pause Lever in direction of arrow again to bring it back to its original position.
This completes all operations required for Timer Recording in Reverse direction.

- To stop Absentee Recording mode, bring Timer Start Switch back to its original PULL position.



* The above drawing shows the case of Absentee Recording of an FM broadcast source.
* Set Input Selector of Pre/Main Amplifiers to TUNER.
* It is also possible to make connections to this tape deck directly from the FM Tuner as indicated in dotted lines.
* In Timer Recording, as it is not necessary to emit the sounds through the speakers, keep the Volume Control of the Pre/Main Amplifiers tuned down.
* Be sure to set the Recording Level of the GX-266D to the ON position.

TIMED PLAYBACK WITH TIMER

MATTERS TO BE CONFIRMED BEFORE OPERATION

- Have a Timer (marketed) ready.
- Is the time indicated on the Timer correct?
- Necessary connections are to be made by referring to the drawing shown below and to that shown on Page 6.
- Position the Recording Lever (REC) OFF.
- The Timer Start Switch should be set to PULL at first.

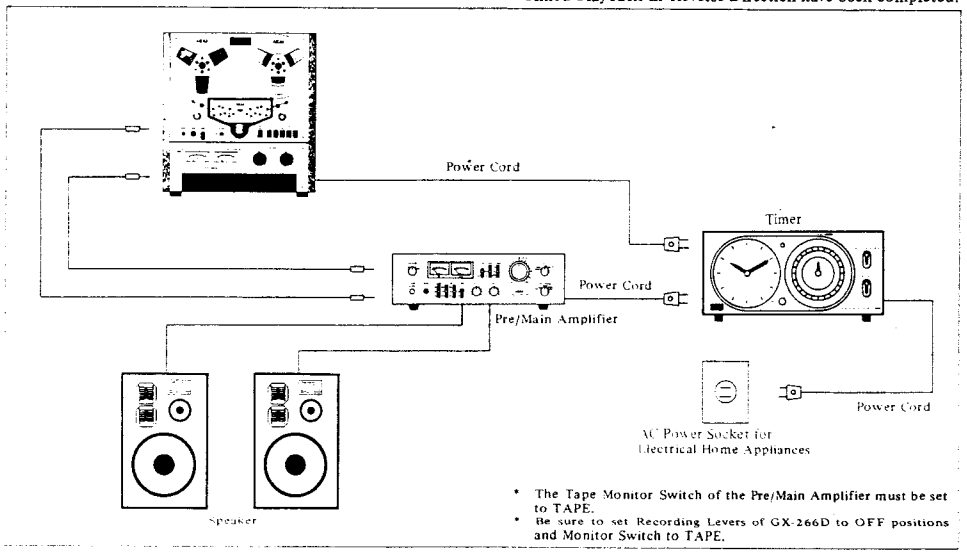
OPERATION

1. Set Timer to EVER-ON.
   * Since the Timer's EVER-ON indication sometimes differs depending on the manufacturer, refer to the Operator's Manual for the Timer for further Details.
2. Switch on power by turning on the Power Switches of this tape deck and the Pre/Main Amplifiers (or of the Receiver).
3. Set a pre-recorded tape and empty reel on their respective Reel Tables.
4. Set the Tape Speed Selector to the speed at which the tape was recorded.
5. Set the Monitor Switch of this tape deck, as well as the Tape Monitor Switch of the Pre/Main Amplifiers (or the Receiver) to TAPE.
6. Depress Forward Button (►) and play tape.
7. Adjust volume from speakers using the Line-Out Control of this tape deck and the Volume Controls of the Pre/Main Amplifiers (or Receiver).
8. On completion of adjustment, rewind tape.
9. Set Reverse Selector according to the purpose for which the recording is to be made.
   * Refer to "AUTOMATIC AND MANUAL REVERSE PLAYBACK" (Page 15).
10. Set Timer to the desired time.
11. Set Timer to AUTO.
    * This will cut power supply to each equipment.
12. While pulling the Timer Start Switch (TIMER START) of this tape deck toward yourself, turn it clockwise and release when the mark reaches the LOCK position.
13. With this, all operations required for Timed Playback with Timer has been completed.
    * To release the Timed Playback mode, return Timer Start Switch to its original PULL position and then depress Stop Button.

- To effect Timed Playback in the Reverse direction, first carry out Operations 1 through 5 and then proceed with the operations described below.

a. Depress Reverse Button and play tape.
b. Carry out Operation 7 described above.
c. On completion of adjustment, bring tape back to its former position by fast-forwarding it.
d. Carry out Operation 9.
e. Push down Pause Lever in direction of arrow and lock it.
f. Depress Reverse Button (◄).
   * Confirm that this will cause the Reverse Direction Lamp to illuminate.
g. While pulling Timer Start Switch toward yourself, turn it clockwise and release when the switch reaches the LOCK position.
h. Carry out Operations 10 and 11. Do not forget to push down the Pause Lever again in the direction of the arrow to bring the lowered lever back to its original position.

With the above operations, all operations required for Timed Playback in Reverse Direction have been completed.



* The Tape Monitor Switch of the Pre/Main Amplifier must be set to TAPE.
* Be sure to set Recording Levers of GX-266D to OFF positions and Monitor Switch to TAPE.

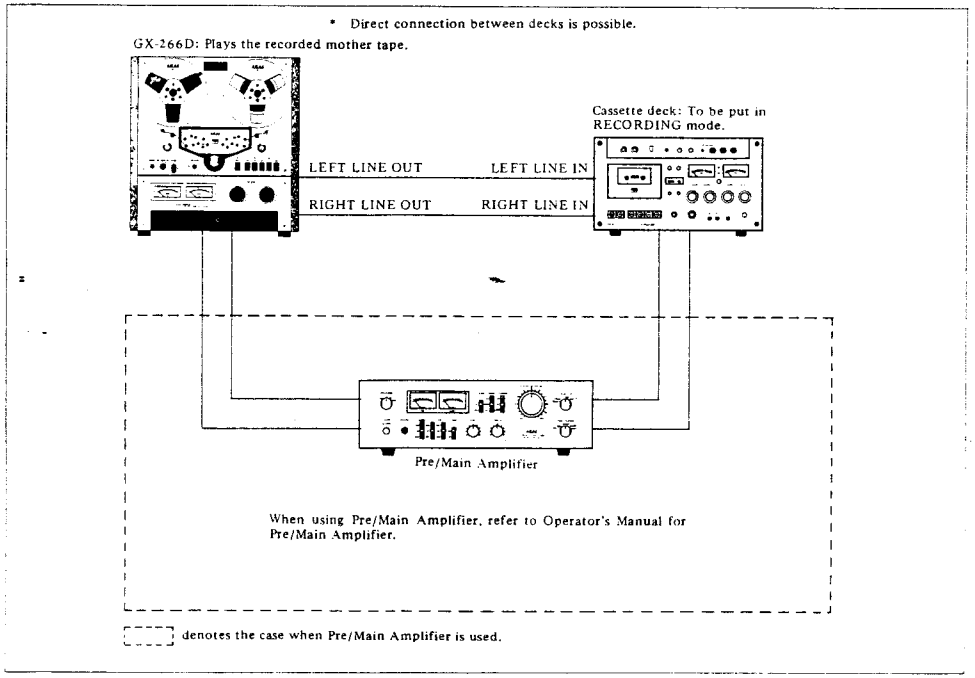
DUBBING

This is the method by which a copy of the recorded tape is made.
The mother tape may be copied just as it is, or the musical numbers may be recorded in a difference sequence. In the latter case too, adoption of the following Dubbing operations will offer great convenience in editing the tape.

DUBBING FROM OPEN REEL TAPE TO CASSETTE TAPE

- Make necessary connections by following the drawing below.
- Switch on the power supply for each equipment.

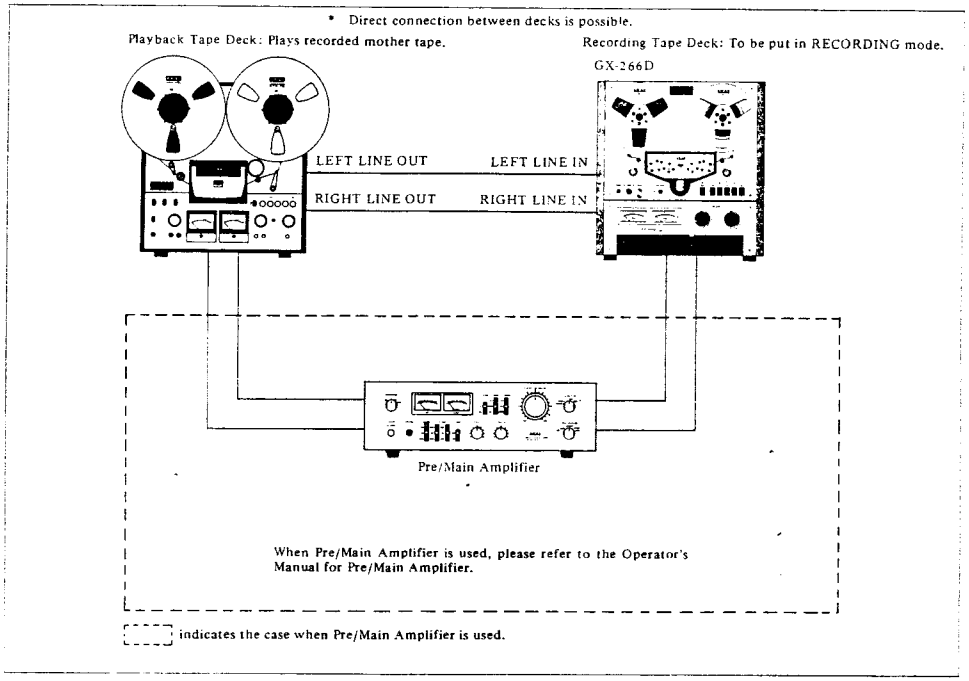
1. Set the pre-recorded tape and empty reel on the respective Reel Tables of this tape deck.
2. Load a cassette tape (with an unbroken break-out tab) on the Cassette Deck.
3. Set this machine in a PLAYBACK mode and the Cassette Deck to a RECORDING STANDBY mode.
   If a 3-Head Cassette Deck (e.g., AKAI GXC-570D, GXC-760C, GXC-740D, GXC-325D) is being employed, set the Monitor Switch to SOURCE, instead of setting the Cassette Deck into a RECORDING STANDBY mode.
4. With the Line-Out Controls of this machine at Maximum, set the recording input level by means of the Line-In Controls of the Cassette Deck.
   * This is to be carried out while observing the VU Meters of the Cassette Deck and seeing to it that the meters' indicators do not exceed "OVU", which implies overlevel input.
   * If the Meter indicates more than "OVU" even when the Line-In Controls of the Cassette Deck are turned to an angle equivalent to about "9 o'clock", the line output should be lowered by turning the Line-Out Controls of this machine counterclockwise.
     If the Line-In Controls of the Cassette Deck can be tuned to an angle range equivalent to about "9 o'clock" to "2 o'clock", the tuning can be viewed as ideal.
5. Bring the tape loaded on this machine to its original position.
6. Change the mode of the Cassette Deck from RECORDING STANDBY to RECORDING.
7. Set this machine to a PLAYBACK mode and play the tape.
   * When a 3-Head Cassette Deck is being employed, SIMULTANEOUS MONITORING should be carried out. (For further details, refer to the Operator's Manual for Cassette Decks.)
8. Regarding the temporary suspension (Pause) of tape, reference should be made to "STEREO PLAYBACK" (Page 12) for this machine, and to the Operator's Manual for Cassette Decks for cassette machines.


* Direct connection between decks is possible.
GX-266D: Plays the recorded mother tape.
Cassette deck: To be put in RECORDING mode.
LEFT LINE OUT
LEFT LINE IN
RIGHT LINE OUT
RIGHT LINE IN
Pre/Main Amplifier
When using Pre/Main Amplifier, refer to Operator's Manual for Pre/Main Amplifier.
denotes the case when Pre/Main Amplifier is used.

DUBBING FROM OPEN REEL TAPE TO OPEN REEL TAPE

- Refer to drawing at below and to that on Page 6 for connection.
- Switch on power supply for each equipment.
- Do not move the recording levers from on position to off position during recording. If recording levers must be switched to off position, depress stop button first and confirm stop mode before switching it off. The use of this machine for Tape Editing is recommended.

1. Set a pre-recorded tape and empty reel on the Playback Deck and a recording tape and empty reel on the Recording Deck.
2. For Recording and Playback operations, refer to the respective Operator's Manual.
   * When this machine is to be used as a Playback Deck, Line-Out Control should be set to Maximum. If the output of the Deck is too big in this condition, tune down the Output Control of this machine in a way to make the Line-In Control to be positioned somewhere in an angle range between the position of "9 o'clock" and "2 o'clock".
- Adjust the recording input level so that it will be at the same level as that indicated on the VU Meter of the Playback Deck.


* Direct connection between decks is possible.
Playback Tape Deck: Plays recorded mother tape.
Recording Tape Deck: To be put in RECORDING mode.
GX-266D
LEFT LINE OUT
LEFT LINE IN
RIGHT LINE OUT
RIGHT LINE IN
Pre/Main Amplifier
When Pre/Main Amplifier is used, please refer to the Operator's Manual for Pre/Main Amplifier.
indicates the case when Pre/Main Amplifier is used.

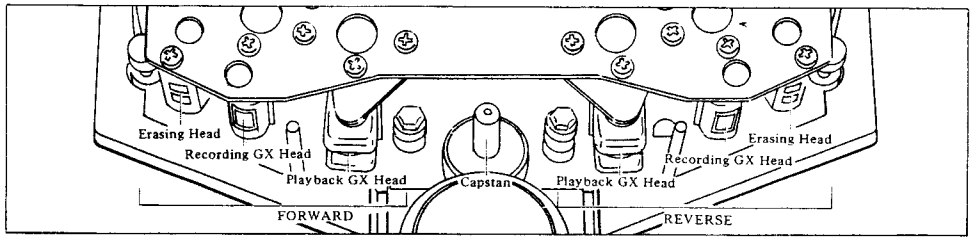
Although this machine is a 4-Track Deck, the following operations should be carried out when editing tape by effecting One-way Recording.
Thorough attention should be paid in cutting tape recorded on both sides as it may result in cutting the program pre-recorded on the opposite side midway.

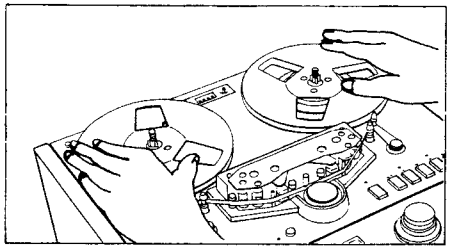
MARKING THE START OF PROGRAM SOURCE

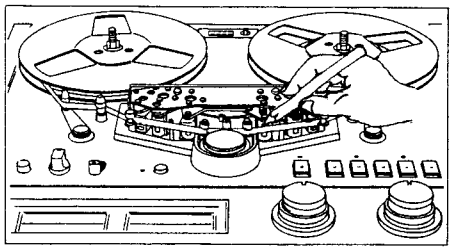
The following operations can be made easier by removing the Head Cover and laying this machine down.

1. At the beginning of the tape, set the Tape Counter to "0000".
2. While playing the tape and monitoring it, push down and lock the Pause Lever in the direction of the arrow at a suitable point.
3. Turn the reels on both sides by hand and locate a discontinuation point between the program and the No-Signal portion.
4. When the exact position has been located, mark the tape on or near the playback head with a dermatograph (marketed), or the like.

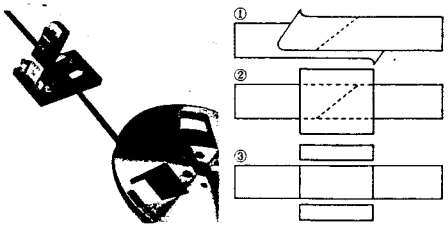
* Do not mistake the position of the Forward Playback Head with that of the Reverse Playback Head.







HOW TO CONNECT TAPE



After marking the desired connection point, cut the tape at the mark using an AKAI Tape Splicer (Editing Kit SK-400: Sold separately by AKAI).

1. Overlap tape ends to be connected and cut tape.
2. Attach Splicing Tape (sold separately) to the place that has been cut and rub thoroughly with finger to prevent the Splicing Tape from coming off.
3. Tape connection is completed by cutting excessive portion of splicing tape with Tape Splicer.

- When a recorded tape has torn apart due to wear, etc., match the ends and connect them using Splicing Tape.
- The tape may be cut with scissors, but it will adversely affect recording when magnetized scissors are used.
- For further details, refer to Instructions for Editing Kit, SK-400.

ERASING OF PRE-RECORDED TAPE

To erase recorded program, either disconnect the recording input connection cord of this machine, or put machine in RECORDING mode with Recording Input Level Control tuned to minimum. Recording will be erased for the portion of tape that has traveled.

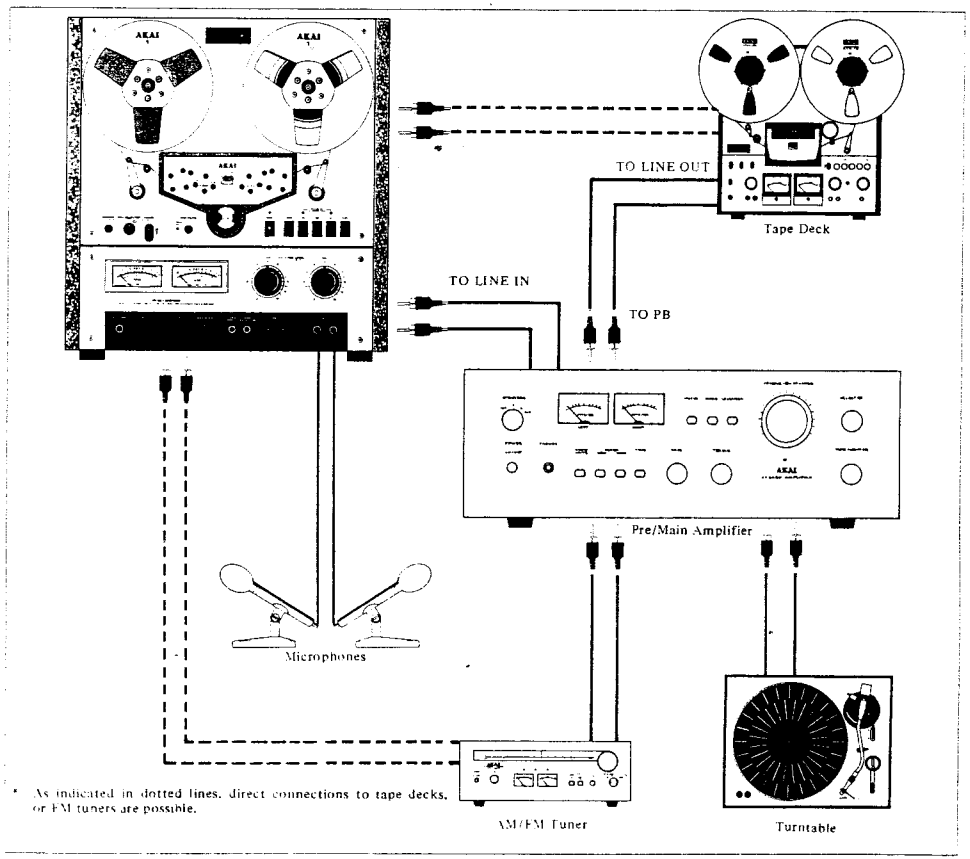
* Since in the RECORDING mode, a new program source will be recorded while simultaneously erasing the pre-recorded program, erasing is not necessary prior to such recordings.

MIXING RECORDING

This is the method in which Recording is carried out while simultaneously mixing the Line Input with the Microphone Input.

- Regulate the recording input level of the microphone input by the Microphone Input Control, with the Microphone plug inserted into the Microphone Jack (MIC) of this machine.
- Regarding the Line Input, connection is to be made either to the FM Tuner, Tape Deck (direct connection to Line-In Jack is possible), or Record Player (to be made through Pre/Main Amplifiers, or Receiver).

Regarding connection, refer to the following drawing and to the drawing shown on Page 6.



* As indicated in dotted lines, direct connections to tape decks, or FM tuners are possible.

FOLLOW-UP RECORDING

Start at a point before recording is to begin. Depress Forward Button (or Reverse Button) and let the tape run. At the point recording is desired, while still depressing the Forward Button (or Reverse Button), depress Recording Button. Confirm here that this will cause the Recording Indicator Lamp to illuminate in red. (Naturally, the machine cannot be put in a RECORDING mode unless the Recording Lever has been positioned ON.)
Although Follow-Up Recording requires some practice, it is the most recommended method for Recording Start, as the machine is put into the RECORDING mode solely by electrical changeover operation from a state where tape travel has been stabilized.
This Follow-Up Recording is even more effective when using unused tape, or tape from which a program has been erased.

CLEANING

Use of the AKAI Cleaning Kit CK-300 (separately sold) is recommended.

- Tone deterioration in high-tone range ——— Clean Recording Head, Playback Head and Capstan.
- Drop-out
- No recording ability
- Incomplete erasing .... Clean Erasing Head.
- Unstable tape travel .... Clean Pinch Roller, Capstan, Tension Arm and Tape Guide.

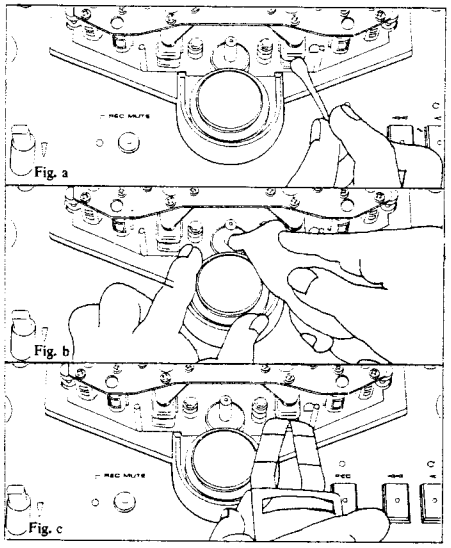


Fig. a

Fig. b

Fig. c

CLEANING METHOD (Fig. a, b)

Clean as shown in figures using a cotton swab stick immersed in cleaning solution.

- For Pinch Roller, cleaning will be easier when using a cloth immersed with cleaning solution.
- For Pinch Roller, use a cleaning solution that will not adversely affect the rubber material.

DEMAGNETIZING

Use of AKAI Head Demagnetizer, AH-9-J, is recommended.

- Tone deterioration in high tone range — Demagnetize Recording Head and Playback Head.
- Noise
- When demagnetizing heads, also demagnetize such parts as Capstan, Tension Arm and Tape Guide.

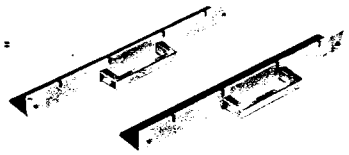
DEMAGNETIZING METHOD (Fig. c)

Prior to demagnetizing parts, do not forget to disconnect power of the entire unit.

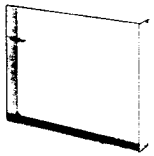
Carry out Operations 1 through 4 described below for each head.

1. Connect power of Demagnetizer to a place at least 30 cm away from the head.
2. Bring the tip of the Demagnetizer close to the gap of the head and make circular motions.
3. With the power of the Demagnetizer still on, draw Demagnetizer gradually away from head moving it in circles.
4. After the Demagnetizer has been brought at least 30 cm away from the head, turn off power.

SEPARATELY SOLD ACCESSORIES



EIA Standard Rack Mount Adapter
EA-266



Dust Cover
DC-266

Metallic Empty Reel
R-7M-J

Tape Splicing Kit
SK-400

Cleaning Kit
CK-300

Head Demagnetizer
AH-9-J

GX-266D

Track System	4 track 2 channel stereo/monaural system
Reel Capacity	Up to 7" reel
Tape Speed	7-1/2 and 3-3/4 ips. (± 0.5%)
Wow & Flutter	Less than 0.06% RMS at 7-1/2 ips. 0.09% RMS at 3-3/4 ips.
Frequency Response	30 to 25,000 Hz ± 3 dB at 7-1/2 ips. using LN tape 30 to 19,000 Hz ± 3 dB at 3-3/4 ips. using LN tape 30 to 26,000 Hz ± 3 dB at 7-1/2 ips. using WR tape 30 to 20,000 Hz ± 3 dB at 3-3/4 ips. using WR tape
Distortion (1,000 Hz "0" VU)	Less than 0.5% at 7-1/2 ips. 1.0% at 3-3/4 ips.
Signal to Noise Ratio	Better than 56 dB (measured via tape with peak recording level of + 6 VU)
Erase Ratio	Better than 70 dB
Bias Frequency	100 kHz
Heads	(6) : Two GX Playback heads, Two GX Recording heads Two Erase heads
Motors	(3) : One AC Servo Capstan Motor Two Eddy Current Reel Motor
F.F. & Rewind Time	90 sec. using 1,200 ft. tape
Output Jacks	Line (2) : 0–0.775V(MAX 0 VU) Required load impedance : more than 20 kohms Phone (1) : 0–100 mV/8 ohms (MAX 0 VU)
Input Jacks	Microphone (2) : 0.25 mV/2.4 kohms Required microphone impedance : 600 ohms Line (2) : 70 mV/100 kohms
Semi Conductors	Transistors : 61, Diodes : 92, IC : 1
Dimensions	404*1 (W) x 470 (H) x 250 (D) mm (15.9 x 18.5 x 9.8")
Weight	18.3 kg*2 (40.4 lbs)
Power Requirements	110/120/220/240V, 50/60Hz Switchable

*1 : 440 (W) mm (17.3") with Wood Side Plate

*2 : 20.6 kg (45.5 lbs) with Wood Side Plate

* For improvement purposes, specifications and design are subject to change without notice.

STANDARD ACCESSORIES

Wooden Side Panels	1 set
7 inch Empty Reel	1
Connection Cords	1 set
Sensing Tape	1
Operator's Manual	1

VOLTAGE AND CYCLE CONVERSION

* Kindly refer this Voltage and Cycle Conversion to a qualified Service Repair Shop or professional service personnel.

To service personnel:

VOLTAGE

The machine is equipped with a universal voltage selector offering a selection of voltage from 110V to 240V AC.

Voltage is preset at the factory according to destination. However, if necessary, readjustment can be made as follows:

(1) DISCONNECT POWER CORD and remove rear panel.

(2) Remove the Voltage Selector Plug and reinsert so that proper area voltage shows through the plug cut-out.

(3) Change fuse to correspond with voltage (Refer to fuse tag instructions for proper fuse).

* To maintain optimum performance and prolong the life of your machine, it is important that the line voltage be held within 10% of standard area voltage.

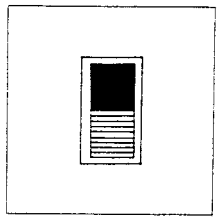
CYCLE

* As the unit is equipped with C.P.G. AC Servo Motor, cycle change for capstan drive motor is not necessary. Following instruction is just for readjusting reel motors torques according to cycles.

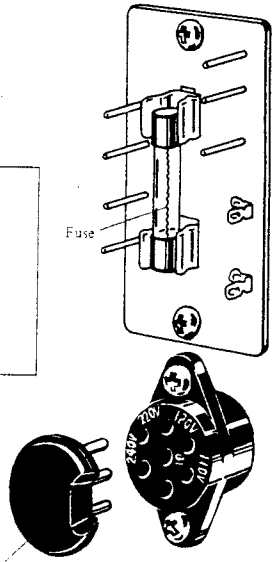
(1) DISCONNECT POWER CORD.

(2) Remove rear panel.

(3) Cycle Change Switch is located on the System Control P.C. Board. Set to 50 Hz or 60 Hz position according to area power source.



Cycle Change Switch



Voltage Selector Plug

TROUBLE SHOOTING

The following Check List shows symptoms that are likely to be mistaken as disorders. Check the cause according to the symptoms and take appropriate measures.

SYMPTOMS	CAUSE	WHAT TO DO
No power, even after turning on Power Switch.	Defective Power Cord Plug, or loose socket.	Check Power Cord Plug and Socket and correct manner of insertion.
Depressing of Function Change Button does not cause tape to travel.	Power has not been connected.	Connect power.
	Improper loading of tape.	Correct loading of tape.
Travels only in Forward (Reverse) direction.	Timer Start Switch is at LOCK position.	Bring Timer Start Switch back to PULL position.
Tape does not travel smoothly.	Deformed reel.	Replace Reel.
	Improper loading of tape.	Correct loading of tape.
	Contaminated, or degenerated tape.	Replace tape.
	Adhesion of dust, or oil, to Capstan, or Pinch Roller.	Clean Capstan and Pinch Roller.
Tape does not travel during Recording or Playback.	Pause Button has been depressed.	Depress Pause Button to bring it back to original state.
Incomplete erasure.	Dirty Erasing Head.	Clean Erasing Head.
	Not in Recording mode.	Effect Recording mode.
Poor tone during playback.	Dirty Playback Head.	Clean Playback Head.
	Magnetized Playback Head.	Demagnetize Playback Head.
	Worn-out tape.	Replace tape.
Poor recorded tone.	Dirty Recording Head.	Clean Recording Head.
	Magnetized Recording Head.	Demagnetize Recording Head.
	Improper use of Tape Selector.	Set Tape Selector according to tape being used.
	Tape is worn-out.	Replace tape.
No recording takes place.	Dirty Recording Head.	Clean Recording Head.
	Recording Lever is positioned OFF.	Position Recording Lever to ON.
Excessive hiss noise.	Recorded at too-low level.	Correct recording level to proper level.
Sound distortion.	Recorded at too-high level.	Decrease recording level to an extent distortion disappears.

When the symptoms do not disappear even after the specified corrections are made, please refer the matter to your nearest authorized Akai Service Station, or the Service Department of Akai Company, Tokyo, Japan, giving all pertinent data as symptoms, Guarantee Period and Model No.

AKAI

MANUFACTURED & DISTRIBUTED BY
AKAI ELECTRIC CO., LTD.
AKAI TRADING CO., LTD.
12-14, 2-chome, Higashi-Kojiya,
Ohta-ku, Tokyo, Japan

Printed in Japan
Ⓓ 520831B2